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In the United States Patent and Trademark Office

Appn. Filed: 10/07/2003
Appn. #: 10/679,305
Applicant: Elizabeth Gay Frayne
Title: "Manipulation of RNA Stability and Protein Synthesis Using Thio-phosphate"
Examiner: Nancy T. Vogel
Art Unit:1636

Commissioner for Patents
Arlington, Virginia, 22313

RE: Petition to Include Parent Material in Child Application

Dear Sir,

I am writing to petition that matter present in a parent application be considered incorporated by reference in a divisional application. The current examiner is withholding consideration of material present in the parent application that bears on the present divisional application. I am an applicant pro se. I was originally advised to elect claims 1-5 for the parent application and prepared two divisional applications for claims 6-7 and 8-13. There was some overlap between the parent application now US Patent 7,125,982 and the present application which required a terminal disclaimer to avoid the appearance of double patenting. The original serial application number is appn. number: 10/007,489 filed: 12/05/2001 titled "Microbial Production of Nuclease Resistant DNA, RNA, and Oligo Mixtures". The examiner was Devesh Khare, PhD, JD in Art Unit:1623. In the original serial application there was a written description for data concerning the incorporation of thio-phosphate into the intestinal cells of a gold fish. Below is an exact copy of what was in the original specification:

Thio-phosphate can also be utilized by whole animals and/or complex tissues. Carassius auratus incorporates thio-phosphate into the DNA of intestinal cells; these cells are known to turnover in adults. Fish can be maintained in distilled water with NovAqua and AmQuel conditioners (US Patent 4,666,610). Goldfish flakes are also added for food. Normal

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phosphate levels in the aquarium are less than 1 mg/L (Hanna Phosphate Test Kit; Hanna Instruments). Fish are transferred to 100 ml of conditioned media with up to 250 mg/L of thio-phosphate added. No adverse reactions are seen in fish incubated for up to two days. Fresh media is prepared daily. Fish are sacrificed and DNA prepared from intestinal cells using DNAzol™ (Molecular Research Center, Ohio). The DNA samples are then tested for resistance to DNase digestion. Samples are incubated in a 50 ul rxn with ~ 1ug of DNA and .5 units of DNase for 0, 5, 10, 15 min. at room temp. DNA from 250 mg/L thio-phosphate media is much more resistant than wildtype DNA or DNA from 25 mg/L thio-phosphate media. Normal DNA and 25 mg/L thio-phosphate treated DNA is digested after 5 min. while 250 mg/L thio-phosphate treated DNA persists beyond 15 min. of digestion.

I later included a photo in the parent application that demonstrated this data and is Figure 3 in US Patent 7,125,982. As the present divisional application focuses on manipulating RNA in cells using thio-phosphate I did not include the fish data. However, claim 9 is the only claim to deal with whole organisms and so this material is useful for the consideration of this claim. This study demonstrates how thio-phosphate levels can be manipulated in feed sources for incorporation into nucleic acids by adding an excess amount of thio-phosphate to compete with endogenous sources. This section also indicates how phosphate levels where measured by using a simple colorimetric phosphate test kit.

I respectfully request that the above information from the original parent application be allowed by way of reference incorporated in the present application. The examiner views this information as new matter. The examiner is not currently considering this information relevant to the present application because I did not specifically make a reference that the parent application is "incorporated by reference". However, I clearly indicated in the specification that the present application is a divisional of Ser. Nr. 10/007,489, Filed Dec. 5, 2001 (see below). The present application is a domestic application with the benefit of priority from related provisional applications as well as the non-provisional parent application filed Dec. 5th, 2001 according to 37 CFR 1.78. The present application was filed prior to September 21, 2004 on October 7th 2003 and according to 37 CFR 1.78 by stating that the present application is a divisional in the specification inherently incorporates it by way of reference. This information should not be considered new matter.

I respectfully request that information from the parent application be allowed in the present application such that the examiner will consider it when evaluating claims in the present application. I also respectfully request that the amendment to the specification filed on 9/8/08 which included the goldfish data indicated above be allowed. The examiner in her response on 11/24/08 directed me to cancel the information added pertaining to the goldfish data.